

Abstract

Encapsulated Chip and Procedure for its Manufacture

An encapsulated chip 10 is attached to a baseplate 12, a conductive layer 14 that is at least as high as the chip 10 is attached to the baseplate. A cover plate 16, provided with electrically conductive surfaces 18, is arranged on this conductive layer 14, which is both electrically and mechanically connected with the chip 10 and the conductive layer 14, for example by means of an anisotropically conductive film 26. The cover plate 16 offers protection against touch contact and other mechanical influences. The anisotropically conductive film 26 completely encloses the chip 10. The cover plate 16 provides an electrical connection between the chip 10 and the conductive layer 14 and, at the same time, serves as encapsulation for the chip 10. Because of this, manufacture of the chip 10 becomes easy and cost-effective and only requires relatively few process steps. Because the conductive layer 14 is as high as the chip 10, or is higher than the chip 10, the chip 10 is subjected to little or no stress when the cover plate 16 is attached to the conductive layer 14 under application of both heat and pressure. The chip 10 may, for example, comprise a transponder, and the conductive layer 14 the transponder aerial. Also described is a procedure for the manufacture of the encapsulated chip, which is suitable, for example, for the manufacture of flexible smart labels.